

Upper Yellowstone Watershed Group  
Mill Creek Subcommittee Meeting Notes  
January 18, 2008

Attending: Jim Robinson, MT DNRC; Jacquie Nelson, Park Conservation District and Upper Yellowstone Watershed; Alan Redfield, Mill Creek Rancher; Marty Malone, Park Co. Extension Agent; Elaine Hale, Mill Creek Property Owner; Senator Lynda Moss, Mill Creek Property Owner; Sharon Sweeney Fee, Joe Brooks TU.

1. Discussion of lack of snow pack monitoring (SNOTel) for Mill Creek watershed. Jim showed data within the upper Yellowstone indicating about 100 % of normal snow pack as of January 16. Jim will draft letter to Gov's Drought Advisory Committee for subcommittee review; other Subcommittee members will ask others to write letters of support for stepped-up monitoring of snow pack in the Mill Creek Watershed.

2. Purpose of this meeting and participant introductions:

a. Recent discussions have occurred about Mill Creek dewatering and not all interested parties have been involved. There was agreement about the need to improve communication and coordinate the distribution of information.

b. Jim Robinson- will initially facilitate meetings of the Mill Creek Subcommittee, DNRC has historic investment in watershed; Mill Creek involvement as part of a public interest role.

c. Alan Redfield - Ranchers feel they get blind sided – there is a need to include ranchers early in the discussion. Last 10 years has been a drought cycle - data shows average of 4 1/4 inches decrease in annual H<sub>2</sub>O for previous ten years. Alan shared information on investment by landowners regarding improved water use efficiency resulting from the pipeline project.

d. Marty Malone here as extension agent - also a land owner but that is not his participation here - goal is to look at big picture - his job is to help farms and ranches stay in business.

e. Sharon Sweeney Fee. Has attended to get info, wants to see where JBTU can help.

f. Lynda Moss - 40 years as Mill Creek property owner - concern with creek running dry - wants to know how to keep it free flowing. She has done research regarding ways to keep Mill Creek flowing and has been speaking with owners and talking about approaches to proactive watershed management.

g. Elaine Hale - 30 yr property owner - has ranching background - understands agricultural value of water from family experience, works in Yellowstone Park – noticed dewatering of Mill Creek and has been looking for information.

3. General discussion of Mill Creek issues -

- Water loss in ditches – are there ways to reduce? Water is too clean to work well with sealant
- What about deep water wells to supplement? – Is it cost-prohibitive to pump the necessary quantities for a short-duration flushing flow?
- Mill Creek water users have invested \$2.3 million on increased water use efficiency (pipeline project).
- Missing participation of Forest Service who owns 90% of watershed

- Upper Yellowstone Watershed Group - needs to be involved.
- When needed, the Upper Yellowstone Watershed Group needs to formally ask for Technical Assistance from agencies – FWP, Forest Service, NRCS.

5. Discussion of recent history of watershed so all are on same page -

a. Jim is researching the work that has been done on Mill Creek over the years. He will compile reports and discuss with the Subcommittee. The effort must move forward by working through the facts.

b. Marty discussed need to prioritize goals for watershed - fish (bridge to river is critical habitat), babbling brook, ranching, keep stream flowing?

c. Alan – This group and others must have broad understanding of 'solutions' e.g., wells include the cost of pumping. Also, need to keep participation local.

6. Discussion of Mill Creek:

a. All ditches on Mill Creek have measuring devices - Diversion data need to be recorded regularly and consistently through the irrigation season. Currently, use data from some devices are recorded sporadically.

b. How to do that? Dave Amman operates the water measurement program for DNRC Water Operations Bureau - can install devices that continuously monitor flow at the invitation of the users and residents. He has the necessary equipment and will be ready to do stream flow monitoring this irrigation season.

c. Such project would include a multi-year monitoring program (at least two seasons) and should include both stream flow and diversion measurements.

d. The primary goal of the hydrology study is to identify inefficiencies and suggest ways to conserve and better use water.

e. Report should include discussion of water rights (i.e., who is using what, where and when).

f. The existing Upper Yellowstone Watershed Group should be used as a forum to discuss results.

g. Must be a transparent process:

1. Communication via website: <http://dnrc.mt.gov/wrd>

2. Watershed group and Park Conservation District will need to agree to start measurements this season.

h. Mill Creek Subcommittee is not responsible for enforcement of Section 310 (Streambed Alteration Permit). This is the responsibility of Park CD.

7. Plan for monitoring flows on Mill Creek

a. A study was done 15 yrs ago - need those results.

b. DNRC has a draft of a plan.

c. Will need to identify geological issues on creek - ie faults etc

d. Marty has a map of water rights and where they are and who has them...there is a 1963 court date of water rights - rights have not changed since. He will share with Jim.

e. In order to access WRDA (Section 3110 of the Water Resources Development Act of 2007) - will need to know what are the real numbers about west slope cut throat spawning on Mill Creek and hybridization - is it important as a contributor to Yellowstone fishery?

f. Subcommittee role: collect and verify data, establish monitoring plan, and will present to UYWG for approval.

8. Issues:

- a. Diversion monitoring possibilities - David Rigler or Keith Neil could be added to Pipeline ditch rider duties; should be neutral person.
- b. Staff time at DNRC – GIS Services, website development, planning, hydrology, etc.
- c. Electronic measuring devices called “Aquarods” will be used to continuously record stream flow at strategic locations along the lower 6 miles.
- d. Need to develop a plan that will monitor all diversions and creek.
- e. Would like to address questions on fire effects, sedimentation, and turbidity.

9. Next steps for Subcommittee -

- a. Prepare website for document distribution
- b. Have Dave Amman develop existing hydrology information.
- c. Refine monitoring plan, there is a draft of plan now. Decide on sites.
- d. Create a mailing list - all members will send mailing list to Jacquie and she will compile. JBTU will post info in newsletters to their members. Subcommittee will make decisions for when a mass mailing is needed.
- e. Sharon will work with Jacquie to apply for MTU mini grant for \$3,500 for Subcommittee work and communications needed to support monitoring plan. Park Conservation District meeting Tuesday 2/5, watershed meeting Thursday Feb 2/7, will ask for approval to submit grant and utilize Jacquie's time for project.
- f. Jim (Dave Amman) will prepare a hydrology presentation to present to Subcommittee, then watershed group.
- g. Present final monitoring plan to Upper Yellowstone Watershed Group meeting prior to irrigation season.

**Next meeting of Mill Creek Subcommittee – February 15, 1:00 PM.  
Conference Room, USDA Building, 5242 Hwy 89 South, Livingston.**